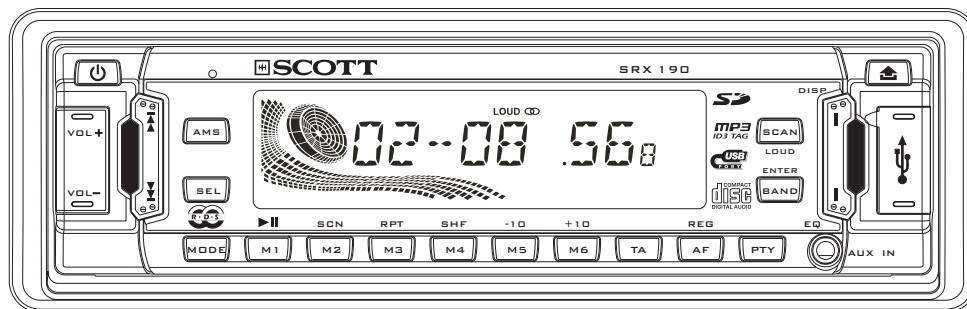




SRX190

CD/MP3/WMA/SD/USB/AUX CAR RADIO

FM Stereo Radio
RDS (Radio Data System) Function
Anti-Shock Mechanism
Telephone Mute Function
40 W X 4 High Power Output

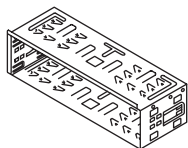


USER MANUAL AND INSTALLATION INSTRUCTIONS

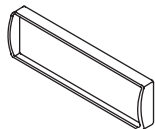
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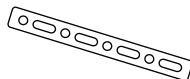
ACCESSORIES



Mounting Bracket
(Half Sleeve)
X 1



Removable Trim Ring
equipped on the unit
X 1



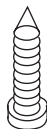
Small metal Strip
X 1



Plain Washer
X 1



Spring Washer
X 2



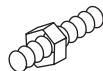
Tapping Screw
X 1



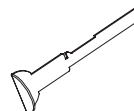
Screw
X 4



Hex Nut
X 1



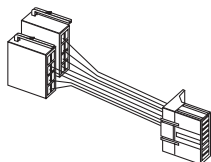
Mounting Bolt
X 1



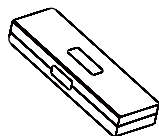
Release Key
X 2



USB Adaptor Cable
X 1



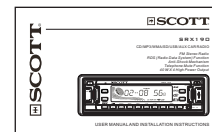
ISO Wire Connector
X 1



Protective Case
X 1



Removable Control Panel
X 1



User Manual
X 1

PRECAUTION

This unit is designed and manufactured with the users safety in mind, however any improper use or operation may result in certain dangers. It is therefore highly recommended to read this manual thoroughly and adhere to the following precautions.

SAFETY PRECAUTIONS

To prevent an electrical shock, do not open the housing of the unit. In any case of malfunctioning, only have the unit serviced by an approved and qualified service centre.

Do not expose to any water or to a very humid environment. Do not operate the unit when your hands are wet as this may cause a short circuit.

For safe driving, keep the volume low in order to concentrate on traffic conditions.

Do not clean the unit with alcohol, only clean with a soft dry cloth.

If the unit has been kept at a high temperature or in a high humidity environment, cool down the car interior before turning on the unit.

Do not use the unit for a long time without running the vehicle engine, it may drain the battery and the vehicle engine may not be able to start.

Before final installation in the dashboard opening, first connect the wiring and make sure the unit is working properly.

Only use parts provided with the unit to ensure proper installation.

Do not route wiring in places that the heat may melt the wiring insulation.

When replacing the fuse, ensure that the new fuse has the capacity recommended by the manufacturer.

OPERATION PRECAUTIONS

Do not operate the player with scratched, bent or broken discs. When a disc is not loaded properly, do not force in into the disc loader.

Never insert any other objects into the disc loader like a coin or pin, etc as this may cause damage or a short circuit.

Do not use different disc formats other than 12cm round discs.

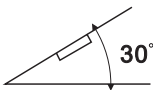
If the unit is disconnected to the battery, it will lose memorized data.

If the source disc has poor sound quality due to scratches, dirt or a bad recording, the playback sound quality may be poor.

Installation

Notes:

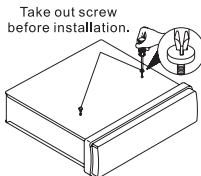
- Choose the mounting location where the unit will not interfere with the normal driving function of the driver.
- Before finally installing the unit, connect the wiring and make sure that the unit works properly.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop.
- If installation angle exceeds 30° from horizontal, the unit may not perform properly.



- Avoid installing the unit where it would be subject to high temperature, such as from direct sunlight, or from hot air, from the heater, or where it would be subject to dust, dirt or excessive vibration.

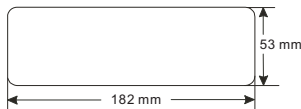
Remove the CD mechanism transit screw before installation

Before install the unit, must remove the two screws with label “REMOVE SCREW”.



Installation Opening

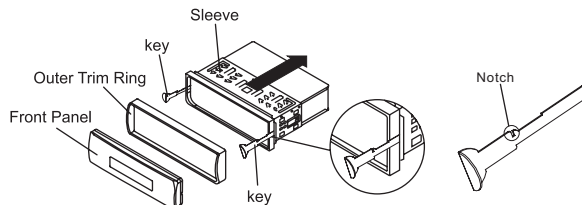
This unit can be installed in any dashboard having an opening as shown below (DIN standard):



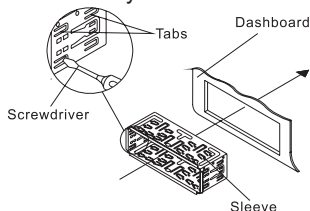
Installing the unit

Be sure you test all connections first, and then follow these steps to install the unit.

1. Make sure the ignition is turned off, and then disconnect the cable from the vehicle battery's negative (-) terminal.
2. Disconnect the wire harness and the antenna.
3. Press the OPEN (🔓) button to remove the control panel (For details, refer to '**USING THE DETACHABLE FRONT PANEL**').
4. Lift the top of the outer trim ring then pull it out to remove it.
5. Use the two supplied release keys to remove the unit from the mounting bracket. Insert the left ("L") and right ("R") release keys as far as they will go (with the notches facing up) into the appropriate slots at the middle left and right sides of the unit. Then slide the sleeve off the back.

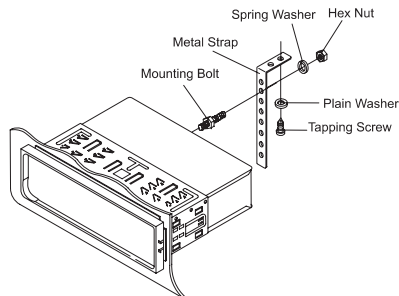


6. Mount the sleeve by inserting the sleeve into the opening of the dashboard and bend out the tabs located around the sleeve with a screwdriver. Not all tabs will be able to make contact, so examine which ones will be most effective. To secure the sleeve in place, bend out the appropriate tabs so that they make contact with the dashboard.



7. Reconnect the wire harness and the antenna and be careful not to pinch any wires or cables.
8. Slide the unit into the sleeve until it locks into place.
9. To further secure the unit, use the supplied metal strap to secure the back of the unit in place. Use the supplied hardware (Hex Nut (M5mm) and Spring Washer) to attach one end of the strap to the mounting bolt on the back of the unit. If necessary, bend the metal strap to fit your vehicle's mounting area. Then use the supplied hardware (Tapping Screw (M5x25mm) and Plain Washer) to attach the other end of metal strap to a solid metal part of the vehicle under the dashboard.

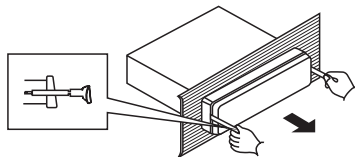
This metal strap also helps ensure proper electrical grounding of the unit. Ensure that you install the short part of the mounting bolt to the back of the unit and the other long part to the dashboard.



10. Reconnect the cable to the vehicle battery's negative (-) terminal. Then replace the outer trim ring and install the unit's front panel (see the steps of '**TO ATTACH THE FRONT PANEL**').

Dismantling the unit


1. Make sure the ignition is turned off, and then disconnect the cable from the vehicle battery's negative (-) terminal.
2. Press the **OPEN** (🔓) button to remove the front panel.
3. Lift the top of the outer trim ring then pull it out to remove it.
4. Insert both of the supplied keys into the slots at the middle left and right sides of the unit then pull the unit out of the dashboard.
5. Remove the metal strap attached to the back of the unit (if attached).

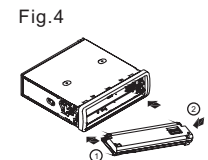
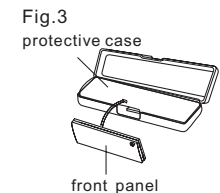
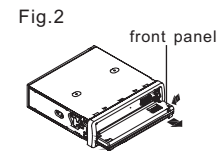
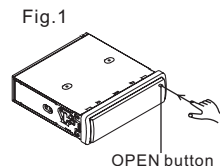


USING THE DETACHABLE FRONT PANEL

REMOVING AND PROTECTING DETACHABLE FRONT PANEL

The front panel of the unit may be removed as a theft deterrent. After removing the front panel, use the case provided to keep the front panel from getting damaged.

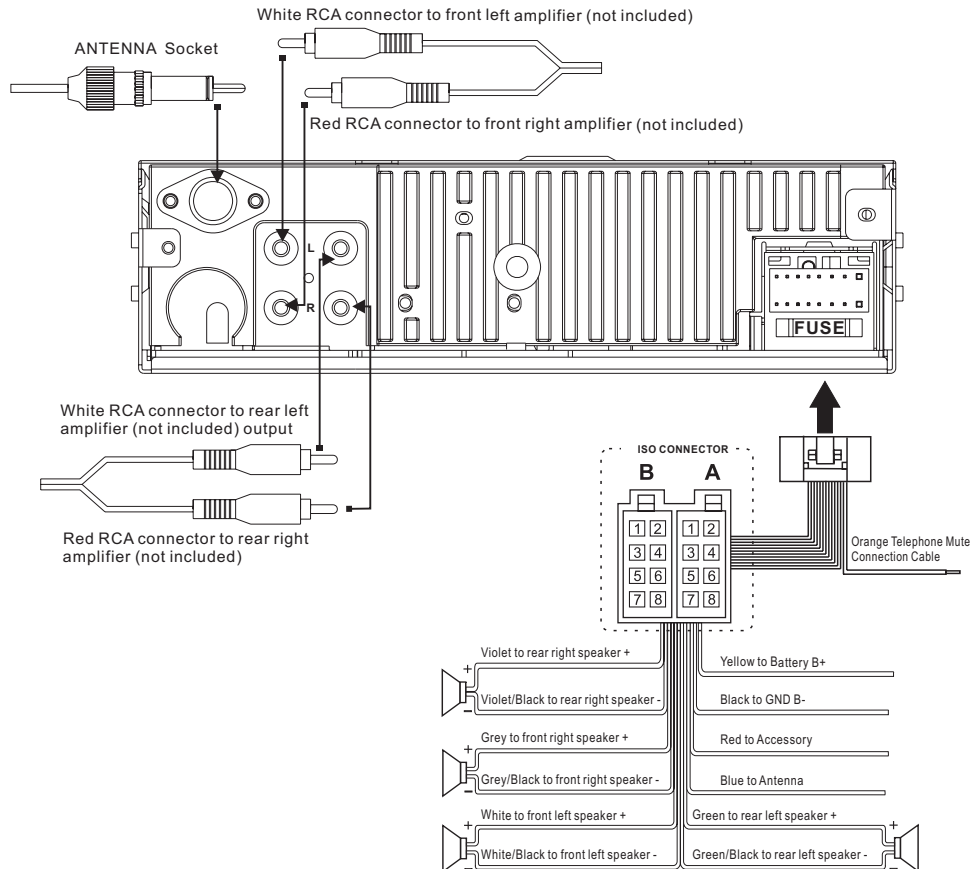
1. Press the OPEN  button (6) to flip down the front panel.
2. Grasp the right side of the front panel, then gently push the front panel towards the left side before pulling it out from the unit.
3. Store the front panel in the protective case provided for safe keeping.



TO ATTACH THE FRONT PANEL

Hold the right side of the front panel with the plate facing down. First attach the left side of the front panel to the unit by inserting the hole into the left holder. Then slightly push it to the left and attach the right side hole into the right holder. Finally push up the front panel.

Wiring Diagram



ISO connector:

Part A:

- A1:** No Connect
- A2:** No Connect
- A3:** No Connect
- A4:** Battery B+ (Yellow)
- A5:** Antenna (Blue)
- A6:** No Connect
- A7:** Accessory (Red)
- A8:** Ground B- (Black)

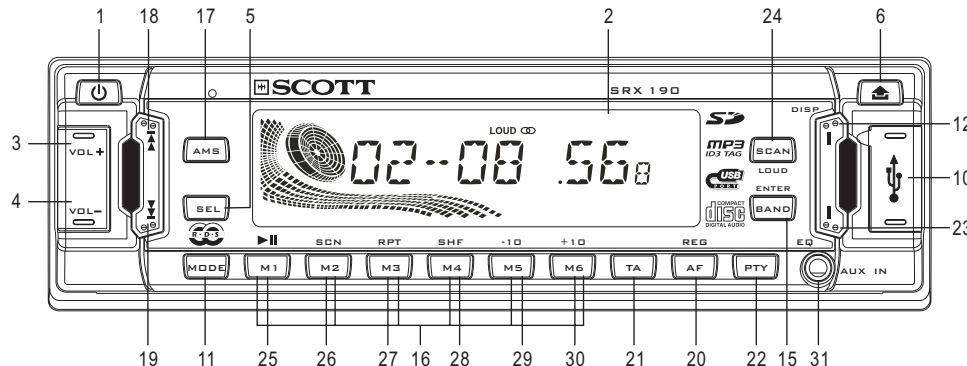
Part B:

- B1:** Rear Right + (Violet)
- B2:** Rear Right - (Violet/Black)
- B3:** Front Right + (Grey)
- B4:** Front Right - (Grey/Black)
- B5:** Front Left + (White)
- B6:** Front Left - (White/Black)
- B7:** Rear Left + (Green)
- B8:** Rear Left - (Green/Black)

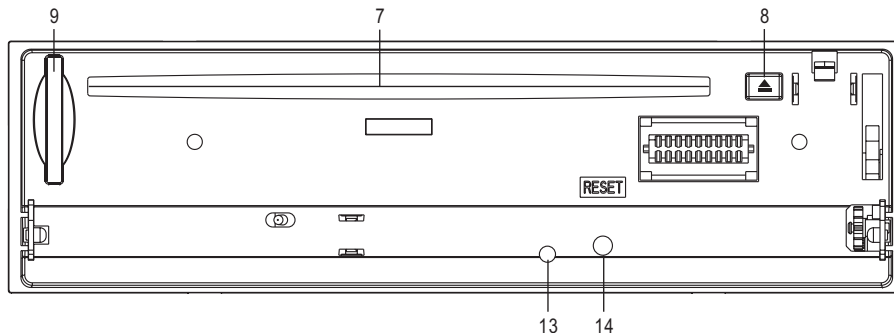
Operations

Location and Function of Keys

Front panel:



The front facet after removing the front panel:



Descriptions of Function Controls

- (1) Power () / Mute Button
- (2) LCD display
- (3) VOL + Button
- (4) VOL - Button
- (5) SEL (MENU/ENTER) Button
- (6) Open () Button
- (7) Disc slot
- (8) Eject () key
- (9) SD/MMC Memory Card Slot
- (10) USB Port
- (11) MODE Button
- (12) DISP (Display) Button
- (13) Anti-theft LED Indicator
- (14) RESET Button
- (15) BAND/ ENTER Button
- (16) Preset Station (M1-M6) Buttons
- (17) AMS (Auto-storage/ Preset memory Scan)
- (18) UP () Button
Tune up, Seek up,
track up, fast forward
- (19) DOWN () Button
Tune down, Seek down,
track down, fast reverse
- (20) AF/REG Button
- (21) TA Button
- (22) PTY Button
- (23) EQ (Preset Equalizer) Button
- (24) SCAN/LOUD Button
- (25) (Play/Pause)/ M1 Button
- (26) SCN (Scan) /M2 Button
- (27) RPT (Repeat) / M3 Button
- (28) SHF (Shuffle) / M4 Button
- (29) -10 track / M5 Button
- (30) +10 track / M6 Button
- (31) AUX Input Jack

General Operations

Reset the unit

Operating the unit for the first time, after replacing the car battery or changing the connections, you must reset the unit.

1. Turn off the unit power.
2. Press the **OPEN** (🔓) button and remove the front panel, then press the **RESET** button with a ballpoint or similar object to restore the unit to the original factory settings.

Power on/off

In power off mode, switch on the unit by pressing any button except the **OPEN** button and the **EJECT** (▲) button or inserting a disc to disc slot, USB device to USB port or SD/MMC card to card slot.

When the system is on, press and hold the **POWER** (⏻) button long to turn off the unit.

Sound adjustment

- Press the **VOL+** or **VOL-** button to adjust volume level.
- Press the **SEL** button repeatedly to select the sound mode volume, bass, treble, balance and fader. Press the **VOL +/-** button to adjust the level of the selected sound mode:

- VOL: from 00 to 45 (45 levels)
- BASS / TRE: from -7 to +7
- BAL (Balance): 8L, 7L, ~, 0, ~, 7R, 8R
- FAD (Fader): 8F, 7F, ~, 0, ~, 7R, 8R

Note:

1. In each mode, when the unit has not been adjusted for about 5 seconds, the current setting will be saved and it will return to the previous mode.
2. When using preset EQ modes, you cannot have access to Bass and Treble settings.

System setup menu

Press the **SEL** button and hold for more than 2 seconds to access the system setup menu mode, then press the **SEL** button to select the menu item in sequence as follows:

“INVOL” (Initial Volume) → “ADJ” (adjust the clock) → “TA VOL” (traffic announcement volume) → “EON” → “DSP” (equaliser) → “LOUD” → “LOC” (local stations) → “STEREO/MONO” → “ALRM” (alarm function) → “Exit”.

After selecting the desired menu item, press the **VOL+** or **VOL-** button to select the mode of the selected item.

“INITIAL VOL” (initial volume) :

“INVOL 17” will be visible on the LCD display. Press the **VOL+** or **VOL-** button to adjust the initial volume of this unit.

CLOCK “ADJUST” (adjust the clock time):

“ADJ 00.00” will be visible on the LCD display. Press the **VOL +** to adjust the hour, and press the **VOL -** button to adjust the minute.

“TA VOL” (traffic announcement volume):

This function allows you to define the minimum volume for the traffic announcements. The adjustable range is 0~45. The defaulted value is 17. Press the **VOL +** or **VOL -** button to adjust the volume of the traffic announcements.

“EON” ON/OFF:

Press the **VOL +** or **VOL -** button to choose “EON ON” or “EON OFF”.

“DSP” (equaliser mode):

The car audio device is equipped with 4 preset equalizer modes. Press the **VOL +** or **VOL -** button (or the **EQ** button) to select one of the following EQ modes: “DSP NONE” → “DSP CLAS” (classical) → “DSP ROCK” → “DSP POP” → “DSP FLAT” (normal). When using preset EQ modes, you cannot have access to Bass and Treble settings.

“LOUD” :

Press the **VOL +** or **VOL -** button (or press and hold down the **LOUD** button) to choose switch the loudness on or off.

“LOC” (local stations):

In urban areas, most stations are strong enough and “LOCAL ON” mode should be selected. Switch to LOCAL OFF mode to search for stations with weaker signals.

STEREO/MONO:

FM station is received in stereo mode. However, if the signal is weak or reception is not as good as you would like, switching to MONO mode usually improves the overall sound quality. Press the **VOL +** or **VOL -** button to choose FM STEREO or MONO audio effect.

“ALRM” (alarm function) :

Press the **VOL+** or **VOL-** button to choose “ALRM ON” or “ALRM OFF”.

Mute on/off

When the unit is switched on, briefly press the **⏻** (Power) / MUTE button to switch mute on or off. The mute will be also switched off when the **VOL+** or **VOL-**, **MODE**, **BAND** is pressed.

To select playback mode

In power on mode, press **MODE** button repeatedly to select the different modes in the following sequence: RADIO, CD (with a disc inside the disc slot) , USB(with USB device inserted), SD/MMC(with SD/MMC card inserted), AUX mode.

Last position memory feature

- During disc, USB, SD/MMC card playback, if you turn off the unit and then switch on it, the unit will resume playing from the point that it was interrupted.
- During disc, USB, SD/MMC card playback, if you switch to other mode, and then return the previous mode again, the unit will resume playing from the point that it was interrupted.

INFORMATION DISPLAY

Press the **DISP** button repeatedly to display as follows:

- When receiving an RDS station:

In radio mode: CT -> PTY(Type of program) -> PS (Name of the station) ->FREQ ->

In CD/USB/SD/MMC mode: CT-> PTY(Type of program) -> FREQ ->PS -> Track number /Running time or other information

* If the unit does not receive CT or PTY information, the display shows "CT NONE" or "PTY NONE".

- When receiving a non RDS station:

In radio mode:CT->PTY NONE-> PS NONE ->FREQ ->

In CD/USB/SD/MMC mode: CT -> PTY NONE -> FREQ -> PS NONE -> Track number /Running time or other information

Each displaying time is 5 seconds, and come back to 1'st position after 5 seconds.

Notes:

CT = clock time FREQ = frequency.

TEL Mute

The audio system automatically mutes whenever a telephone call comes in.

Note: the function will not work if a cable is not connected to the car phone.

1. When a call comes in

When a call is received, 'TEL CALL' is displayed and all the unit functions are temporarily interrupted.

2. When the call ends

Hang up the phone.

'TEL CALL' disappears from the display.

The unit returns to the previous state and the volume increases gradually.

ESP Function

This unit has the electronic shockproof function. This enables the unit to be shockproof for several seconds:

CD: 40 seconds.

MP3/WMA: 100 seconds.

Anti-theft LED Indicator

Designed as a theft deterrent, the red LED will flash when the unit is turned off and the front panel is removed.

Radio Operations

Press the **MODE** button to select the radio mode.

To select a radio band

In radio mode, Press the **BAND** button repeatedly to select one of the three radio broadcasting bands: ->FM 1-> FM 2 -> FM 3 ->.

Auto/ Manual tuning(FM 50KHz/step)

- Automatic search mode:

Press the **▲** or **▼** button, the automatic search will start. It will search upward or downward for the strong signal radio station within the current band. "AUTO" appears on the LCD display.

Press and hold the **▲** or **▼** button until "MANUAL" appears on LCD display, it will change into manual searching mode.

- Manual search mode:

Press the **▲** or **▼** button repeatedly to manually search upward or downward step by step for the desired radio station within the current band. For fast manual searching, press and hold the **▲** or **▼** button.

In manual search process, if the both buttons haven't been pressed within 5 seconds, it will change into automatic search mode automatically. "AUTO" appears on the LCD display.

To store / recall a preset radio stations

You can store up to a total of 18 radio stations in the memory (18 FM), manually or automatically.

- To store a station:

- Select a band (if needed)
- Select a station by **▲** or **▼** buttons, refer to auto / manual tuning.
- Hold a Preset button (M1-M6) for at least 2 seconds.

- To recall a station:

- Select a band (if needed).
- Press a preset button (M1-M6) briefly to recall the stored station. In case of RDS mode, the strongest AF is selected after AF searching.

Auto store / Preset scan

- Preset scan:

Press the **AMS** button to scan each preset station. If the field strength level is more than the threshold level, the radio will hold at this preset station for 5 seconds with sound output, then go to next station until all 6 FM stations are scanned, finally the radio will play at the preset station where scanning started. The preset station number on the LCD will flash during the process. Press the **AMS** again to stop preset scan.

- Auto store:

Press the **AMS** button for more than 2 seconds to start auto store. The radio will scan from the lowest frequency, and automatically store the 6 strongest stations into the preset memories. When auto store is complete, the radio will start preset scan to the stored 6 station.

Scan function

Press the **SCAN** button briefly and the tuner starts scanning. When the tuner detects a station with a good signal, it pauses for about 5 seconds and after that it continues to scan. Press any key to stop the scanning.

RDS (Radio Data System) Operations

To replace the current frequency with the alternative frequency

Press **AF/REG** button short to switch AF mode on or off. There are 3 state of the segment “AF” on the LCD display:

Segment “AF” off: AF switching mode off.

Segment “AF” on: AF switching mode on, and has RDS information.

Segment “AF” flashing: AF switching mode on, but RDS information is not received yet.

When AF switching mode is selected, the radio checks the signal strength of the AF all the time. The interval of checking time of each AFs depends on the signal strength of current station, from a few minute for strong station to few seconds for weak station. Every time that new AF is stronger than current station, it switches over to that frequency for very short time. Because the mute time of AF switching or checking time is very short, it is almost inaudible in case of normal program. During FM mode, when AF is on, manual store, Auto store/preset scan function can only receive and save RDS program.

Regional Program Operation

Press **AF/REG** button for 2 seconds to switch on or off region mode.

Some broadcasting stations change their program from normal broadcasting to regional broadcasting for a certain time period.

When region is on, the current listening program remains unchanged. When region is off, it allows the reception moved to the regional station.

Using PTY to Select Program

Press and hold down the **PTY** button for more than 2 seconds to enter the program type menu. The default type is NEWS.

The **VOL+** or **VOL-** button can be used to select different program types as follows:

NEWS -> AFFAIRS -> INFO -> SPORT-> EDUCATE -> DRAMA -> CULTURE -> SCIENCE -> VARIED -> POP M -> ROCK M -> EASY M -> LIGHT M -> CLASSICS -> OTHER M -> WEATHER -> FINANCE-> CHILDREN -> SOCIAL -> RELIGION -> PHONE IN -> TRAVEL -> LEISURE -> JAZZ -> COUNTRY -> NATION M -> OLDIES -> FOLK M -> DOCUMENT -> TEST -> ALARM -> NEWS

If no button is pressed for 5 seconds, it returns to previousl state.

Press the **PTY** button briefly to switch the PTY search on or off. When PTY search mode is on, and the **▲** or **▼** button is pressed, PTY search will start. PTY search stops when the unit finds a station with the selected program type, otherwise, "NOT FND" (not found) will be visible on the LCD display. During the PTY search process, press any key to stop the PTY search.

Listening to Traffic Announcement

TA button is operated as follows:

Press **TA** button to turn **TA** mode on or off.

When **TA** mode is on and a traffic announcement is transmitted:

- When the unit was in CD (MP3/WMA), USB/SD/MMC or AUX IN mode, it will switch temporarily to radio mode.
- Temporary switch over to an EON linked station when EON detects a traffic announcement on that other program.
- If the volume level was under the threshold point, it will be raised to the threshold point.
- When **TA** mode is on, segment "**TA**" is turned on.
- When a TP station is received,segment "TP" is turned on.




TA interruption function

The current traffic announcement is cancelled by pressing this key. But the **TA** mode will not be off.

CD/MP3/WMA Disc Operations

Press the **MODE** button to select the disc mode.




Loading/Removing a Disc

1. Press the **OPEN** () button on the front panel to flip down the front panel and then insert a disc into the disc slot with the printed side facing upward; and close the front panel, the player will play the disc automatically.
2. To eject the disc, press the **OPEN** () button to open the front panel and then press the **EJECT** () button.



Playing/Pausing

- During playback, press the  button to interrupt the playback. Press again to resume the playback.

Playing the previous/ next track

- During playback, press the  button to play the next track.
- During playback, press the  button once to play the current track from the beginning. Press the  button twice continuously to play the previous track.

Playing forward and backward

During playback, press and hold the  or  button to fast forward or fast reverse. Release the buttons when the desired location is found, and normal playback starts.

Playing the +/- 10 track up or down

During MP3/WMA playback, press the **M5 (-10)**, **M6 (+10)** button to play the +/- 10 track up or down.

Introduction playback

You can play the beginning of every track for 10 seconds in sequence.

In CD/MP3/WMA file playback, briefly press the **SCN** button to play the first 10 seconds of each track. Press it again to stop scanning and play the current track.

Repeat playback

In CD/MP3/WMA files playback, briefly press the **RPT** button to continuously play the current track. Press again to stop repeat playback and resume normal playback.

Random playback

- In CD/MP3/WMA file playback, briefly press the **SHF** button to play all tracks of the disc in random sequence. Press again to cancel random playing.

Select the tracks for playback in MP3 or WMA mode

You can access 3 different types of track search modes for MP3/WMA files:

Track search → File name search → Folder search → Exit

Track search mode:

a) Press the **AMS** button once to access the track number search mode which allow you to quickly find a specific MP3/WMA title by its file number, and "00*....." will be displayed.

b) Press the **VOL+** or **VOL-** button to select your favorite track. Finally press the **BAND/ENTER** button to confirm and play the selected track.

File name search mode:

a) Press the **AMS** button twice, "A*****" will be shown on the LCD display and the first character "A" will blink.

b) Press the **VOL +** or **VOL -** button to set the blinking character. The character will be changed from "A" to "Z" and "0" to "9" in the order of A~Z and 0~9. Press the **SEL** button to confirm the character entered and the next character will blink for setting.

c) After you have entered the first letters of the file you are looking for, press the **BAND/ENTER** button to confirm. If the unit finds a file starting with these letters, play starts automatically. If no file corresponding to your search is found, the message "NO MATCH" will be visible on the display. If there are several files starting with these letters, the unit will start to play the first file in alphabetical order.

Folder search mode:

a) Press the **AMS** button three times to access the folder search mode.

b) Press the **VOL + / VOL -** button or **▲ / ▼** button to select a desired folder. If there is no root folder in the disc, the LCD will display "ROOT".

c) Press the **BAND/ENTER** button to play the first track of the selected folder.

ID3 information for MP3 file

In MP3 mode, the folder name, file name, title, artist and album information will scroll on the LCD display automatically.

Note:

As long as the current playing MP3 music contains relevant ID3 tag information in version 1.0/2.0 format, the 3 items underlined above will be scrolling on the LCD display, otherwise, they will not appear.

SD/MMC Memory Card Operations

Using the SD/MMC card:

When you insert a SD/MMC card into the memory card slot, the player will read the SD/MMC card automatically.

If you insert a disc into the disc slot while reading the SD/MMC card, the unit will play the disc. You can press **MODE** button to select SD/MMC mode.

SD/MMC memory card playback operation is the same with the CD/MP3/WMA disc operations described above.

Note:

- When reading the memory card, please don't touch or take out the card.
- If following the instruction above, the unit can't read the card, please check if the card is in good condition, or take out the card and then insert it into the card slot once more.

USB Operations

Using the USB stick:

When you insert a USB stick through the port, the unit will search for the MP3/WMA files and start to play them automatically. If you insert a disc into the disc slot while reading the USB stick, the unit will play the disc. You can press **MODE** button to select USB mode.

Note:

- Use the USB adaptor cable, if necessary.
- The operations of playing MP3/WMA files in the USB is the same as the MP3/WMA operation described in the CD/MP3/WMA disc operations.
- When reading the USB stick, please don't touch or remove it.
- If following the instruction above, the unit can't read the file in the USB stick, please check if the device is in good condition, or take it out then insert it into the USB port once more.
- The main unit can only support the standard USB-memory device.
- USB MP3 player is not a standard which means different brand name or different models have their own standard. So this product cannot support all MP3 players.
- When connecting an MP3 player and there is a normal battery in the player (non rechargeable battery), you should remove the battery from the MP3 player and then connect it to the USB port. Otherwise, it may cause battery burst.
- When reading a USB device, be sure not to remove it from the USB port (change mode beforehand).

Aux In Operations

This system has an external input jack, so you can listen to music from external devices connected to this unit. Press the **MODE** button to switch to the **AUX** mode on or off.

DISC NOTES

A. Notes on discs:

1. Attempting to use non-standard shape discs (e.g. square, start, and heart) may damage the unit. Be sure to use round shape CD discs only for this unit.
2. Do not stick paper or tape, etc, onto the label side or the recording side of any discs, as it may cause a malfunction. Dirt, dust, scratches and warping discs will cause disoperation.

B. Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs):

1. Be sure to use discs with following marks only for the unit to play:



2. The unit cannot play a CD-R and CD-RW that is not finalized. (Please refer to the manual of your CD-R/CD-RW recorder or CD-R/CD-RW software for more information on finalization process).
3. Depending on the recording status, conditions of the disc and the equipment used for the recording, some CD-Rs/CD-RWs may not be played on this unit. (see *1)

*1: To have more reliable play back, please see following recommendations:

- a. Use CD-RWs with speed 1x to 4x and write with speed 1x to 2x.
- b. Use CD-Rs with speed 1x to 8x and write with speed 1x to 2x.
- c. Do not play a CD-RW which has been written more than 5 times.
- d. The car radio supports discs which comply with the ISO 9660 level 1 or level 2 format, or the Joliet or Romeo format.

C. Notes on MP3 files

1. When naming a MP3 file, be sure the file name extension is 'MP3'.
2. For a non-MP3 file, even though the file name extension is 'MP3', the unit cannot recognize it.

D. Handling and Cleaning

- Dirt, dust, scratches and warping discs will cause mal-operation.
- Do not place stickers or make scratches on discs.
- Do not warp discs.
- A disc should always be kept in its case when not in use to prevent from damage.
- Do not place discs in the following places:
 1. Direct sunlight.
 2. Dirty, dusty and damp areas.

3. Near car heaters.
4. On the seats or dashboard.

Disc Cleaning

Use a dry soft cloth to wipe the surface. If the disc is quite dirty, Use a soft cloth slightly moistures with isopropyl (rubbing) alcohol. Never use solvents such as benzene, thinner or conventional record cleaners as they may mar the surface of the disc.

Note:

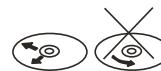
A disc may become somewhat scratched (although not enough to make it unusable) depending on the way it is handled and conditions in the usage environment. Note these scratches are not an indication of any problem with the player.



Do not touch
the underside
of the disc



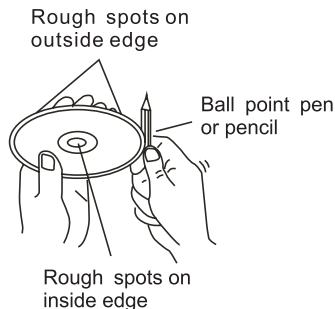
Do not bend



Wipe the disc from center
toward the outside edge

E. Precautions when using new discs

A new disc may have irregularities. It will sometimes be necessary to remove these rough edges in advance by using a ballpoint pen or pencil as shown in the illustration.



Specification

1. GENERAL

Power Supply Requirements.....	DC 12 Volts, Negative Ground
Unit Dimensions.....	178(W)x160(D)x 50(H) mm
Tone Controls.....	- Bass (at 100 Hz) ± 10 dB - Treble (at 10 KHz) ± 10 dB
Maximum Output Power.....	.4x40 watts
Current Drain.....	15 Ampere (max.)

2. CD PLAYER

Signal to Noise Ratio.....	> 55 dB
Channel Separation.....	> 40 dB
Frequency Response.....	40Hz - 18 KHz
Audio output (RCA).....	1.5Vrms \pm 0.3V 10K Ω
Discs/files played.....	CD-DA, CD-R/RW/MP3/WMA

3. RADIO

FM

Frequency Range.....	87.5 - 108.0 MHz
IF.....	10.7 MHz
Sensitivity (S/N=30dB).....	4 μ V
S/N ratio.....	55dB(mono)
Stereo separation.....	30 dB (65dBu, 1KHz)

4.USB/SD/MMC card

USB Port type.....	1.1
USB Port Maximum Handling Capacity.....	2GB
SD/MMC Card Slot Maximum Handling Capacity.....	1GB

Trouble Shooting

Symptom	Cause	Solution
No power	The car ignition switch is not on.	Turn the ignition key to "ACCESSORY" in order to switch the unit on.
	The connections are not correct.	Check the connections.
	A fuse has blown in the vehicle	Check the vehicle fuses.
	The fuse at the back of unit has been blown.	
Disc can not be loaded or ejected.	Presence of CD disc inside the player.	Remove the disc from the player, and insert a new one.
	Inserting the disc in reverse direction.	Insert the CD with the label facing upward.
	The surface of CD is extremely dirty or scrapped.	Clean the disc or try to replace a new one.
	Temperature inside the car is too high.	Cool off or until the ambient temperature return to normal.
	Condensation	Leave the player off for an hour or so, and then try again.
No sound	Volume is in minimum.	Adjust volume to a desired level.
	The wiring is not properly connected.	Check wiring connection.
Sound skips	The installation angle is more than 30°.	Adjust the installation angle less than 30°.
	The surface of CD is extremely dirty or scrapped.	Clean the disc or try to replace a new one.
The operation keys do not work	1. The built-in micro-processor is not operating properly due to electrical noise.	1. Press the RESET button.
	2. The front panel is not properly installed.	2. Fix the front panel into its place.
No radio reception.	The antenna cable is not connected.	Insert the antenna cable firmly into the antenna socket of this CD player.
In automatic search mode the radio does not stop at a transmitting station.	The transmission signals are too weak.	Select a radio station manually. Check the antenna connection. Change to "DX" (distant) mode.



If at any time in the future you should need to dispose of this product, please note that waste electrical product should not be disposed of with household waste. Please recycle where facilities exist. Check with Your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive)